



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/508,955	10/04/2004	Yukihiko Minamida	040497	7477
23850 7590 03/23/2007 ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP 1725 K STREET, NW. SUITE 1000 WASHINGTON, DC 20006			EXAMINER AFTERGUT, JEFF H	
			ART UNIT	PAPER NUMBER
			1733	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		03/23/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/508,955

Applicant(s)

MINAMIDA ET AL.

Examiner

Jeff H. Aftergut

Art Unit

1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/4/04, 8/17/06</u> | 6) <input type="checkbox"/> Other: ____.  |

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 4, 5 and 6 rejected under 35 U.S.C. 102(b) as being anticipated by Nichol.

Nichol taught that it was known at the time the invention was made to apply a hot melt adhesive coating upon a paperboard substrate wherein the applicator roller was rotated in the same direction of travel as the paperboard and wherein the speed of the applicator roller was different than the speed of the feed of the paperboard material by 25%. The applicant is referred to column 2, line 54-column 3, line 4.

3. Claims 1, 3-6, 10 and 13/10 are rejected under 35 U.S.C. 102(b) as being anticipated by Ballard:

Ballard taught that it was known to apply a hot melt adhesive to a tufted product wherein the hot melt adhesive was applied with a roller 5 which was operated at a peripheral speed which was 50% less than the speed of the tufted product 1. Subsequent to the coating with the hot melt, the tufted product was laminated with a backing material 10 in a laminating nip 14, 15.

4. Claims 13 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese Patent 3-175028.

Art Unit: 1733

Japanese Patent '028 suggested that those skilled in the art would have laminated a decorative paper to a wood board with a polyurethane hot melt adhesive there between. While the claims recite that the paper is laminated to the wood where the wood was coated with the adhesive material with an application roller, it is not seen how the manipulative steps recited produced a materially different product from that disclosed by Japanese Patent '028.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of Nichol.

The admitted prior art as described by applicant in the specification from page 1, line 15 to page 4, line 10 (and in particular page 1, lines 15-21, page 3, lines 3-14), the applicant has admitted that it was known at the time the invention was made to apply a hot melt adhesive material via a roller applicator upon a wood surface and subsequently laminate a decorative paper upon the wood surface. The problem faced with the artisan is that because of the high viscosity of the hot melt adhesive and the limited open time, the hot melt adhesive is not self leveling and does not provide a smooth coating on the surface which was suitable for decoration with the decorating sheet material. The admitted prior art stated that it was desirable to utilize a hot melt adhesive because of

Art Unit: 1733

concerns regarding volatile emissions for example. The reference failed to teach that one skilled in the art would have coated the hot melt adhesive upon the substrate with a speed differential between the rate at which the wood substrate was fed and the rate of rotation of the coating roller.

Nichol suggested that it was known at the time the invention was made to apply a hot melt glue upon a substrate where the glue roller was operated at a rate of 25% less than the rate of feed of the substrate in order to provide a an even and uniform coat of the hot melt upon the substrate (as opposed to operation where the substrate and the roller were operated in the same direction and at the same rate of travel), see column 2, line 54-column 3, line 4. Clearly, those skilled in the art viewing Nichol and the admitted prior art would have understood that coating a hot melt adhesive with a roller coating operation would have regulated the speed of the roller and the speed of travel of the substrate such that there was at least a 25% differential in the speeds so that one was able to impart a smooth and even coat of the hot melt adhesive upon the surface of the substrate. Note that the problem identified by applicant relating to the coating of the wooden surface with the hot melt adhesive and the roller coating process was that one was not able to achieve a smooth and even coating as the hot melt adhesive was not self leveling. By operating the roller at a speed differential of at least 25% different from the rate of travel of the substrate, the reference to Nichol was able to achieve a smooth and even coating of the hot melt upon the substrate. It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the teachings of Nichol to regulate the rate of rotation of the coating roller in order to ensure that there

Art Unit: 1733

was a speed differential of at least 25% between the coating roller for the hot melt and the substrate when coating a wooden substrate with a hot melt adhesive in order to ensure that the coating was smooth and even in the admitted prior art.

With regard to the various dependent claims, note that the admitted prior art clearly suggested that one would have employed a roller coating operation to apply hot melt adhesive to a wooden surface prior to decoration of the same wherein one laminated a decorative cover to the wooden substrate with a laminating nip arrangement (the use of a laminating nip to laminate a decorative paper to a wooden substrate is taken as conventional in the art). Additionally, the use of plural coating stations is taken as conventional in the art as a function of the desired thickness and amount of adhesive required on the wooden surface. It certainly would have been within the purview of the ordinary artisan to provide plural coating stations wherein one applied plural layers of hot melt on the surface prior to the gluing of the decoration thereon. Additionally, note that the feeding of a wooden material through the coating station would have included nip rollers and such a feed mechanism for wood is taken as conventional in the art of feeding wood materials in a lamination operation. It should be noted that the coating mechanism of Nichol included the use of a back up roller in the coating station.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Japanese Patent '105 suggested that one skilled in the art of making an optical disc would have operated the coating roller at a rate at least 25%


Art Unit: 1733

faster than the speed of travel of the substrate being coating with a hot melt adhesive. German Patent 19916776 taught the application of a hot melt adhesive to a wooden board prior to the application of a laminate to the same, see Figure 2.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff H. Aftergut whose telephone number is 571-272-1212. The examiner can normally be reached on Monday-Friday 7:15-345 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Jeff H. Aftergut  
Primary Examiner  
Art Unit 1733

JHA  
March 19, 2007